

MULTI BEAM SCANNING WITH BRIGHT/ DARK FIELD IMAGING

Abstract

Bright and dark field imaging operations in an optical inspection system occur along substantially the same optical path using the same light source by producing either a circular or an annular laser beam. Multiple beam splitting is achieved through the use of a diffractive optical element having uniform diffraction efficiency. A confocal arrangement for bright field and dark field imaging can be applied with multiple beam scanning for suppressing the signal from under-layers. A scan direction not perpendicular to the direction of movement of a target provides for improved die-to-die comparisons.